

Application No.: 10/024432

Docket No.: KAQ-003RCE

REMARKS

Claims 1-23 are pending in the application of which claims 1, 16 and 21 are independent. Claims 16 and 21 have been amended. No claims have been added or deleted. No new matter has been added.

Claim Rejections Pursuant to 35 U.S.C. §102(b)

Claims 1-8, 11-12, 16-17 and 21-23 were rejected under 35 U.S.C. §102(b) as being anticipated by Guck (United States Patent Number 5, 848, 415, hereafter "Guck"). For the reasons set forth below, Applicants respectfully traverse the rejections.

Summary of Claimed Invention

The claimed invention provides a mobile content framework (MCF) that facilitates abstracting content and behavior from the rendering of content on a requesting device. Content is abstracted in a manner specifically tailored to take into account the limited resources of certain devices such as mobile device. The abstraction process allows the distribution of uniform content to multiple types of requesting devices. Content is generated specifically for each device, both from a display and attribute standpoint and a content navigation standpoint. The MCF includes a generic markup language, referred to as Wireless Abstract XML (hereafter WAX) that is easily extended and can be translated into a variety of different mobile device markup languages. Content is first translated into WAX from the original language of the content provider, or is created in WAX originally, and then converted into a device appropriate language for a requesting mobile device. WAX is designed to enable the content developer to describe content at a more abstract level than that used in individual protocols. The greater level of abstraction enables the subsequent conversion of WAX into the languages used by the requesting mobile devices such as WML, HDML and HTML. Typical markup languages focus on how content is rendered on the device, while WAX focuses on generic but smart objects whose transformation is tailored to specific devices. During this transformation process, the MCF ensures the best type and length of text is used, the best type and size of image is used, and

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that the content is well suited and customized for the device attributes. The customization process uses device attribute records stored in databases to choose appropriate content for the requesting device.

Summary of Claim Amendments

Applicants have amended independent claim 16 to correct an antecedent basis issue. Applicants have amended claim 21 so as to conform the amended limitation in claim 21 to the limitation in the corresponding method claim, claim 1.

Summary of Guck

Guck discusses the use of a transmission protocol and application format conversion process that may be utilized with an object database. Requests from a client device for a document cause the requested document to be retrieved, and if necessary, converted to a transmission protocol and application format required or requested for the requesting client device. The conversion process uses many different converter objects to perform the required transformations. In the event a single converter for the required transformation cannot be identified, the system of Guck allows multiple converters to be chained together to produce the result as part of multi-stage process.

Argument

Guck fails to disclose all of the elements of Applicants independent claims, claims 1, 16 and 21, and therefore fails to anticipate Applicants invention.

In Applicants' Amendment filed on April 17, 2006, Applicants submitted a number of arguments in support of their position that Guck failed to anticipate the pending independent claims. As set forth in more detail below, Applicants respectfully suggest that the Examiner's Response to Arguments section on pages 2-4 of the present Office Action fails to address all of the Applicants' submitted arguments. Additionally, Applicants traverse the remainder of the Examiner's arguments.

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Specifically, Applicants have suggested that Guck fails to disclose the limitations in independent claims 1 and 21 of:

- 1) "providing content in a generic markup language, said content in a generic markup language susceptible to being converted to a plurality of markup languages capable of being displayed to a user of a mobile device"; [emphasis added]
- 2) "providing at least one registry containing device information for multiple types of mobile devices, said information including device attributes for each type of mobile device; [emphasis added] and
- 3) "converting said content in a generic markup language into device-specific content in response to said request, said device-specific content being customized based upon at least one device attribute in the device information retrieved from the at least one registry." [emphasis added].

With regard to the providing of a generic markup language, Guck does not disclose the use of a generic markup language to perform the conversion process. In the previous Amendment, the Applicants specifically discussed the sections of the Guck reference relied upon by the Examiner as disclosing the use of a general markup language in converting documents (discussing inter alia col. 4, lines 40-42 and 63-65) and explained how the cited sections did not discuss the use of a generic markup language either specifically or by implication. Rather, the cited sections discuss the conversion of documents into different formats generally. The other section relied on by the Examiner in this office Action (col. 4, lines 25-27) as disclosing the providing of content in a generic markup language, discusses the storage of the document as a resource object. This section of Guck does not disclose the use of a generic markup language. In fact, as the discussion at col. 7, lines 16-19 makes clear, the database object created on behalf of the source document is accessible in its original form but is realized as a database object. There is nothing to suggest the use of a generic markup language to store the source content in Guck. Additionally, Applicants in their previous Amendment pointed out that a close reading of Guck leads to the conclusion that a generic markup language is not present in the Guck system as the focus in Guck is on providing a different converter object for each specific document conversion. Applicants stated:

The Examiner's attention is respectfully directed to column 11, lines 33-35 which states: "In summary, the Converter object type hierarchy has numerous converter objects,

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each of which can perform a specific conversion"[emphasis added]. See also col. 11, lines 4-7, which state: "The present system is provided with several hundred converters, which handle the conversion of numerous text, image, video, audio and other formats"[emphasis added]. Guck is not discussing the transformation of content appearing in an intermediate generic markup language into device-specific content, but rather is discussing direct conversion from source to target. If Guck was utilizing a generic markup language as the starting point for the conversion process, there would be no need for "several hundred converters".

Applicants respectfully suggest that the Examiner failed to address this argument as to why Guck would need several hundred converters for direct conversions if Guck was utilizing a generic markup language, and further failed to indicate how Applicants analysis of the Examiner's cited sections was incorrect. Contrary to the assertion in the Response to Arguments section paragraph(i), page 3, Applicants specifically addressed the sections of the Guck reference relied upon by the Examiner and asserted why the Applicants felt the Examiner was incorrect. Applicants are entitled to have the Examiner specifically address those arguments.

Applicants further wish to respectfully suggest that that the Examiner's statement on Page 3 of the Office Action, para (i), that Guck discloses an on-the fly conversion to other types of data and format and that therefore Guck shows the use of a generic markup language, is unsupported. Neither the cited Summary nor Figure 3 that were cited by the Examiner discuss the use of generic markup language. The summary discusses application format and communication protocol conversions and as the discussion of Figure 3 makes clear, Figure 3 depicts the use of virtual files and resource objects. In Guck, the term "format" "refers to a specific arrangement of data on a disk or other storage media in order to meet established application requirements (col. 5, lines 54-57). Example formats given are WORD, HTML and plain text. In Guck, the term "protocol" refers to a set of formal rules describing how to transmit data, especially across a network (col. 5, lines 66-67). Example protocols discussed include FTP, HTTP and IMAP. Neither section discusses the use of a generic markup language to store the content being converted.

With regard to Applicants second argument noted above, and the providing of a registry of device attributes, the Examiner agreed that the limitation was not specifically disclosed but argued that it was inherent because of a conversion based on device attributes. As will be pointed out in more detail below, there is no conversion based on device attributes in Guck and

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so therefore no inherently disclosed registry of device attributes.

With regard to the Applicants' third argument that Guck fails to disclose the converting of content in a generic markup language based upon a device attribute, Applicants respectfully disagree with the Examiner's citation of Figure 7 as disclosing the required limitation. Figure 7 discusses the conversion of content from one application format to another application format and/or the use of a particular communication protocol but does not disclose the conversion of generic markup language content based on a device attribute. The Figure 7 discussion (col. 12, lines 28- col. 13, line 10) discusses the conversion of a document from text/rtf format (please note that text/rtf is not a generic markup language and does not satisfy Applicants claim limitations) to three different data formats (text, audio, audio) using three different transmission protocols (HTTP, IMAP and IVR). Applicants respectfully assert that the conversion of content from a first non-generic markup language format (text/rtf) into other requested data formats and the use of requested transmission protocols can not be cited as disclosing the converting of generic markup language content based upon a device attribute. The conversion in Guck is not based upon a device attribute such as screen size, color depth, translation rules, memory, storage capacity, communication speed, or type of operating system of the mobile device. The communication protocols and application data formats discussed in Guck are not the equivalent of the device attributes claimed by Applicants. Applicants claimed invention customizes content based upon the requesting device's attributes. Guck represents the prior art system which could deliver documents in a proper application format and with the right communication protocol but did not customize based upon a device attribute.

Accordingly, since for at least these reasons Guck fails to disclose all of the limitations found in Applicants claims, Applicants request the allowance of independent claims 1 and 21 and the claims dependent thereon. For the same reasons, since independent claim 16 also includes limitations requiring the conversion of content in a generic markup language based upon device attributes, limitations not disclosed by Guck, Applicants request the allowance of independent claim 16 and the claims dependent thereon.

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Claim Rejections Pursuant to 35 U.S.C. §103(a)

Claims 9-10, 13-15, and 18-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Guck in view of Bickmore et al (United States Patent No.: 6,857,102 , hereafter "Bickmore"). For the reasons set forth below, Applicants respectfully traverse the rejections.

Argument

The combination of references cited by the Examiner, Guck in view of Bickmore, fails to teach or suggest all of the limitations found in Applicants' independent claims upon which claims 9-10, 13-15 and 18-20 are dependent. Bickmore discusses a document re-authoring system, but does not disclose, teach or suggest the claim limitation discussed above that are missing from Guck. Accordingly, Applicants request the allowance of claims 9-10, 13-15, and 18-20.

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CONCLUSION

In view of the above, Applicants believe the pending application is in condition for allowance.

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Respectfully submitted,

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